ABSTRACT

AIM OF THE STUDY:

• To study the prevalence of post-mortem artefacts.
• To profile the various factors contributing to the post-mortem artefacts.
• To suggest preventive measures to minimize post-mortem artefacts.

OBJECTIVES OF THE STUDY:

• To differentiate an ante-mortem injury from a post-mortem artifact.
• To indentify the most common post-mortem artifact.
• To enumerate the various factors leading to the post-mortem artefacts.
• To identify the most common reason for artifact formation.
• To recognize what are the precautions to be taken to minimize artefacts.

Methodology:

The present work is a cross-sectional study of artefacts in all the autopsies conducted in the Department of Forensic Medicine & Toxicology, Govt. Kilpauk Medical College & Hospital between January 2017 and December 2017.

Results:

During this study period, out of 2866 cases that came for autopsy, 358 cases were selected by simple randomization and were studied. Out of the 358 cases, presence of artefacts was confirmed in 122 cases which accounted for 34%. Maximum number of artefacts was noted among male sex in 41-50 years age group, in the south-west monsoon season, more commonly in the month of June.
Artefacts are more frequently seen in the sudden deaths, those deaths occurring in the evening time period, those having a wide post-mortem interval of more than 36 hours and in those bodies retrieved on the roadside.

Unknown dead bodies, hospital treated deaths and decomposed bodies are more susceptible for artefact formation.

Among the 122 cases positive for artefacts, artefacts were introduced before autopsy in 102 cases (83.7%), while in 20 cases it was introduced during autopsy (16.3%). Among the 102 artefacts identified as introduced between death and autopsy, 7 were identified as agonal artefacts (6.9%), 32 were due to post-mortem changes (31.4%), 44 were third party artefacts (43.1%), while 5 were due to environmental causes (4.9%) and 14 cases accounted for miscellaneous artefacts (13.7%). Maggots activity were the most common artefact accounting for 12 cases (11.7%) followed by ant bite marks which were seen in 11 cases (10.7%). The artefacts due to decomposition changes were the second most common artefact of which, the oozing of Post-Mortem fluid is the major decomposition artefact.

Toxicological artefacts like contamination of blood with pericardial fluid, gastric contents while collecting and mixing with wrong preservative were noted in 3 cases that contributed for 15.0% of the artefacts introduced during autopsy.

**Keywords:** Artefacts, Factors, Unknown Bodies, Treated Bodies, Therapeutic Artefact, Decomposition Artefact, Agonal Artefacts, Anthrapophagy, Third Party Artefact, Environmental Artefact, Refrigeration Artefact, Transportation Artefact, Artefacts During Autopsy.